

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Olin Chlorine Release - Removal Polrep
Initial and Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VI

Subject: POLREP #1
Initial and Final POLREP
Olin Chlorine Release
A6VD
Plaquemine, LA

To: Craig Carroll, EPA Region 6
Jeff Dauzat, LDEQ
Gene Dunegan, Louisiana State Police

From: Nabil Mzee, On-Scene Coordinator

Date: 4/19/2022

Reporting Period: 24 hours

1. Introduction

1.1 Background

Site Number:	A6VD	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	Removal Assessment
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	4/18/2022	Start Date:	4/18/2022
Demob Date:	4/19/2022	Completion Date:	4/19/2022
CERCLIS ID:	LAN000622216	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Emergency response - release at an active chemical facility.

1.1.2 Site Description

1.1.2.1 Location

The Olin Plant is located within the DOW Chemical Facility at 21255 LA-1 N Plaquemine, LA 70764. The release point in the Olin Plant is located at latitude 30.3175, longitude -91.2347. The site is in an industrial area with the nearest residential properties approximately 0.3 miles south of the facilities southern border. The Mississippi River borders the northern and eastern ends of the facility and agricultural fields border the western end of the facility.

1.1.2.2 Description of Threat

The failure of a chlorine compressor on a chlorine production unit led to a fire which resulted in a subsequent release of chlorine into the atmosphere. The the potentially responsible party (PRP) reported observing measurements of chlorine between 10-15ppm in the vicinity of the compressor and measurements of chlorine as high as 4.2 ppm downwind near residential properties.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The EPA observed sustained chlorine measurements between 0.1ppm and 1.4ppm at various locations downwind of the facility between 1:35AM and 3:26AM on 4/19/2022. After 4:59AM on 4/19/2022, the EPA only observed transient measurements of chlorine not exceeding 0.1 ppm downwind of the facility. By the morning of 4/19/2022, the compressor had been isolated from all feed lines and the chlorine being released was residual chlorine gas in the compressor. In addition, the PRP had several personnel conducting air monitoring within the facility, at the facility fence line, and also in the downwind community. The Louisiana Department of Environmental Quality (LDEQ) was also on-site overseeing the response efforts and conducting downwind community air monitoring.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The PRP reported to the National Response Center (Report# 1333887) a chlorine release at the Olin plant within the Dow Chemical Facility in Plaquemine, Louisiana at 9:19PM after discovering the release at

8:38PM on 4/18/2022. According to the PRP, the failure of a chlorine compressor on a chlorine production unit led to a fire which resulted in a subsequent release of chlorine into the atmosphere. The fire at the incident location was extinguished at approximately 9:30AM on 4/18/2022. The PRP initially reported observing a chlorine measurement as high as 4.2 ppm in Plaquemine. A Shelter-In-Place order was activated within the facility and in the city of Plaquemine on 4/18/2022 as a result of the incident. At approximately 12:10AM on 4/19/2022, the Shelter-In-Place order in Plaquemine was lifted. There is still an active Shelter-In-Place order for certain units within the facility. The PRP has personnel conducting air monitoring within the facility and at the facility fence line and also has a third party contractor conducting downwind community air monitoring. There have been no reported injuries off-site or within the facility. The compressor has been isolated from all feed lines and residual chlorine gas continues to be emitted from the compressor at a diminishing rate.

2.1.2 Response Actions to Date

The EPA Superfund Technical Assistance and Response Team (START) was activated to respond to the incident on the night of 4/18/2022. START arrived on-site at 12:32AM on 4/19/2022 and conducted downwind air monitoring with a ToxiRAE Pro equipped with a chlorine sensor. The detection limit for chlorine with the ToxiRAE Pro is 0.1 ppm. The Level 1 Acute Exposure Guideline Limit for chlorine is 0.5 ppm over all exposure durations. The highest chlorine measurements observed by START were sustained measurements of 1.4 ppm at 2:46AM and 3:26AM on 4/19/2022 at a vacant lot approximately 0.2 miles away from residential properties. START also observed sustained chlorine measurements ranging from 0.1 ppm to 0.4 ppm between 1:35AM and 2:36AM on 4/19/2022 near various residential properties. START only observed transient measurements of chlorine not exceeding 0.1 ppm after 4:59AM on 4/19/2022. START demobilized from the site at 8:36AM on 4/19/2022. LDEQ has not observed any measurements of chlorine above their instrument detection limits (0.1ppm) in a downwind community since START demobilized from the site.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

The PRP is the Olin Corporation.

2.1.4 Progress Metrics

There are no progress metrics to report.

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

The PRP will allow the remaining residual chlorine gas in the compressor to vent into the atmosphere and will also drain the remaining liquid chlorine in the compressor via a gravity feed into a separate container. The PRP will continue to conduct air monitoring within the facility boundaries, at the facility fence line, and in downwind communities. LDEQ will remain on-site to provide oversight of the PRP response efforts and conduct downwind community air monitoring until the compressor is stable.

2.2.1.2 Next Steps

Once the compressor is stable, the Shelter-In-Place order within the facility will be lifted. The EPA continues to receive frequent updates from the PRP and LDEQ on the status of the chlorine compressor and air monitoring observations. The EPA will continue to monitor the incident and has requested prompt notification from all participating entities if the situation becomes unstable.

2.2.2 Issues

There are no anticipated issues or current issues to report.

2.3 Logistics Section

No information to report.

2.4 Finance Section

2.4.1 Narrative

No information to report.

2.5 Other Command Staff

2.5.1 Safety Officer

No information to report.

2.5.2 Liaison Officer

No information to report.

2.5.3 Information Officer

No information to report.

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

LDEQ and the Louisiana State Police mobilized to the incident.

4. Personnel On Site

START Contractors, Erik Hadwin and Jeff Wright.

5. Definition of Terms

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

EPA - United States Environmental Protection Agency

LDEQ - Louisiana Department of Environmental Quality

NPL - National Priorities List

POLREP - Pollution Report

PRP - Potentially Responsible Party

START - Superfund Technical Assistance and Response Team

6. Additional sources of information

6.1 Internet location of additional information/report

Additional information can be found at <https://response.epa.gov/olinchlorine>.

6.2 Reporting Schedule

This is an initial and final POLREP for the incident. No further reporting will be submitted.

7. Situational Reference Materials

No information available at this time.